

**IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1 Claim 1. (*Currently Amended*) A universal fleet electrical system for distributing electrical power to a  
2 plurality of aftermarket accessories in a fleet vehicle, comprising:
- 3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having  
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,  
5 each relay further having a fuse in series with the relay solenoid;
- 6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting  
7 selection junction box having:
- 8 (i) a plurality of lighting circuits, each lighting circuit being connected to the  
9 switch contacts of a separate one of said plurality of lighting relays,  
10 each lighting circuit branching into a plurality of lighting subcircuits,  
11 each subcircuit having a fuse for circuit protection; and
- 12 (ii) at least one terminal block having a plurality of terminals, each lighting  
13 subcircuit being connected to a separate terminal on said terminal  
14 block, each terminal having a connector for attachment of a lighting  
15 subcircuit accessory wire;

16 (iii) wherein a plurality of lighting subcircuit accessories are programmably  
17 connected to the switch contacts of a user selected lighting relay by  
18 connecting a connector from the subcircuit accessory to a terminal on  
19 said terminal block;

20 (c) a console panel having a plurality of user operable switches for controlling operation  
21 of a plurality of aftermarket accessories added to the fleet vehicle, the console panel being  
22 electrically connected to said fuse panel and said lighting selection box, wherein said console panel  
23 further comprises:

24 (i) at least three lighting level switches, each lighting level switch being  
25 connected to a separate one of said lighting relays in order to control  
26 application of power to three different combinations of aftermarket  
27 lighting accessories by a single switch;

28 (ii) a take down switch connected to one of said lighting relays for controlling  
29 application of power to aftermarket lighting accessories used when  
30 pulling over a motorist; and

31 (iii) a spare switch connected to one of said lighting relays for providing a user  
32 with a programmable console switch for adding on additional  
33 aftermarket accessories; and

34 (d) a universal wiring harness electrically connecting said fuse panel, said lighting selection  
35 junction box, and said console panel, the wiring harness having a plurality a connectors distributed  
36 throughout the fleet vehicle adapted for connection to aftermarket accessories, the connectors  
37 being configured as plug and play connectors, the wiring harness having a plurality of color-coded  
38 wires stamped with circuit identification labels[[,]] ~~whereby installation and maintenance time for~~  
39 ~~aftermarket accessories is reduced.~~

1 Claim 2. (*Currently Amended*) The universal fleet electrical system according to claim 1, wherein said  
2 fuse panel further comprises:

3 (a) a positive voltage buss bar adapted for connection to a positive terminal of the fleet  
4 vehicle's battery;

5 (b) a ground buss adapted for connection to a negative terminal of the fleet ~~vehicles~~  
6 vehicle's battery;

7 (c) a pair of main power fuses, each main power fuse branching into a plurality of normally  
8 hot auxiliary circuits, each auxiliary circuit having a fuse for protection of the auxiliary circuit, the  
9 main power fuses being directly connected to said positive voltage buss bar so that the auxiliary  
10 circuits are normally hot, each auxiliary circuit having wires with red insulation and bearing indicia  
11 identifying the circuit for quick identification; and

12 (d) an ignition relay having a solenoid tapped into the fleet vehicle's ignition switch and

13           having normally open switch contacts connected to a plurality of ignition controlled auxiliary  
14           circuits, each ignition controlled auxiliary circuit having an auxiliary fuse and having wires with  
15           orange insulation and bearing indicia for rapid circuit identification.

Claim 3. (*Canceled*)

1    Claim 4. (*Currently Amended*) The universal fleet electrical system according to claim [[3]] 1, wherein  
2    said fuse panel further comprises a pair of diodes connected in series between said three lighting level  
3    switches in order to prevent feedback when at least one accessory is commonly connected to more than  
4    one of said lighting level switches and both switches are turned to an "ON" position.

1    Claim 5. (*Original*) The universal fleet electrical system according to claim 1, wherein said console panel  
2    further comprises a programmable timer delay connected to said universal wiring harness for turning off  
3    circuits a predetermined period of time after the fleet vehicle ignition switch is turned to an "OFF" position.

1    Claim 6. (*Original*) The universal fleet electrical system according to claim 1, wherein said wiring harness  
2    includes a modular connector having:

3                   (a) a through-the-roof base connector; and

4                   (b) a light bar wiring harness having a weatherproof boot connector attachable to said base  
5           connector, the light bar wiring harness being adapted for a light bar accessory mountable on a roof  
6           of the fleet vehicle.

1 Claim 7. (*Original*) The universal fleet electrical system according to claim 1, wherein said console panel  
2 further comprises a keyed switch interconnected with a security power control relay adapted for connection  
3 with a fleet vehicle's battery, the keyed switch and security power control relay enabling a user to connect  
4 and disconnect power to the universal wiring harness.

1 Claim 8. (*Original*) The universal fleet electrical system according to claim 1, wherein said universal fleet  
2 electrical system further comprises a master switch with a circuit breaker adapted for connection to a fleet  
3 vehicle's battery, the master switch and circuit breaker enabling a user to connect and disconnect power  
4 to the universal wiring harness.

1 Claim 9. (*Currently Amended*) A universal fleet electrical system for distributing electrical power to a  
2 plurality of aftermarket accessories in a fleet vehicle, comprising:

3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having  
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,  
5 each relay further having a fuse in series with the relay solenoid;

6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting  
7 selection junction box having:

8 (i) a plurality of lighting circuits, each lighting circuit being connected to the  
9 switch contacts of a separate one of said plurality of lighting relays,

10 each lighting circuit branching into a plurality of lighting subcircuits,  
11 each subcircuit having a fuse for circuit protection; and  
12 (ii) at least one terminal block having a plurality of terminals, each lighting  
13 subcircuit being connected to a separate terminal on said terminal  
14 block, each terminal having a connector for attachment of a lighting  
15 subcircuit accessory wire;  
16 (iii) wherein a plurality of lighting subcircuit accessories are programmably  
17 connected to the switch contacts of a user selected lighting relay by  
18 connecting a connector from the subcircuit accessory to a terminal on  
19 said terminal block;  
20 ~~[[ (b) ]]~~ (c) a console panel having a plurality of user operable switches for controlling  
21 operation of a plurality of aftermarket accessories added to the fleet vehicle, the console panel  
22 being electrically connected to said fuse panel and said lighting selection box, the console panel  
23 having at least three lighting level switches, each lighting level switch being connectable to different  
24 combinations of aftermarket lighting accessories, wherein said console panel further comprises:  
25 (i) at least three lighting level switches, each lighting level switch being  
26 connected to a separate one of said lighting relays in order to control  
27 application of power to three different combinations of aftermarket  
28 lighting accessories by a single switch;

29                   (ii) a take down switch connected to one of said lighting relays for controlling  
30                               application of power to aftermarket lighting accessories used when  
31                               pulling over a motorist; and  
32                   (iii) a spare switch connected to one of said lighting relays for providing a user  
33                               with a programmable console switch for adding on additional  
34                               aftermarket accessories; and  
35                   [[ (c) ] ] (d) a universal wiring harness electrically connecting said fuse panel, said lighting  
36                   selection junction box, and said console panel, the wiring harness having a plurality a connectors  
37                   distributed throughout the fleet vehicle adapted for connection to aftermarket accessories, the  
38                   connectors being configured as plug and play connectors.

1    Claim 10. (*Original*) The universal fleet electrical system according to claim 9, wherein said universal  
2    wiring harness further comprises a plurality of color-coded wires stamped with circuit identification  
3    labels[[,] ~~whereby installation and maintenance time for aftermarket accessories is reduced.~~

1    Claim 11. (*Currently Amended*) The universal fleet electrical system according to claim 9, wherein said  
2    fuse panel further comprises:  
3                   (a) a positive voltage buss bar adapted for connection to a positive terminal of the fleet  
4                   vehicle's battery;

- 5 (b) a ground buss adapted for connection to a negative terminal of the fleet vehicles battery;
- 6 (c) a pair of main power fuses, each main power fuse branching into a plurality of normally
- 7 hot auxiliary circuits, each auxiliary circuit having a fuse for protection of the auxiliary circuit, the
- 8 main power fuses being directly connected to said positive voltage buss bar so that the auxiliary
- 9 circuits are normally hot, each auxiliary circuit having wires with red insulation and bearing indicia
- 10 identifying the circuit for quick identification; and
- 11 ~~[[e)]~~ (d) an ignition relay having a solenoid tapped into the fleet vehicle's ignition switch
- 12 and having normally open switch contacts connected to a plurality of ignition controlled auxiliary
- 13 circuits, each ignition controlled auxiliary circuit having an auxiliary fuse and having wires with
- 14 orange insulation and bearing indicia for rapid circuit identification.

Claim 12. (*Canceled*)

- 1 Claim 13. (*Currently Amended*) The universal fleet electrical system according to claim ~~[[12]]~~ 9, wherein
- 2 said fuse panel further comprises a pair of diodes connected in series between said three lighting level
- 3 switches in order to prevent feedback when at least one accessory is commonly connected to more than
- 4 one of said lighting level switches and both switches are turned to an "ON" position.



1 Claim 14. (*Currently Amended*) ~~[[The]]~~ A universal fleet electrical system according to claim 9 for  
2 distributing electrical power to a plurality of aftermarket accessories in a fleet vehicle, comprising:

3 (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having  
4 a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,  
5 each relay further having a fuse in series with the relay solenoid;

6 (b) a lighting selection junction box electrically connected to said fuse panel, the lighting  
7 selection junction box having:

8 (i) a plurality of lighting circuits, each lighting circuit being connected to the  
9 switch contacts of a separate one of said plurality of lighting relays,  
10 each lighting circuit branching into a plurality of lighting subcircuits,  
11 each subcircuit having a fuse for circuit protection; and

12 (ii) at least one terminal block having a plurality of terminals, each lighting  
13 subcircuit being connected to a separate terminal on said terminal  
14 block, each terminal having a connector for attachment of a lighting  
15 subcircuit accessory wire;

16 (iii) wherein a plurality of lighting subcircuit accessories are programmably  
17 connected to the switch contacts of a user selected lighting relay by  
18 connecting a connector from the subcircuit accessory to a terminal on  
19 said terminal block;

20            (c) a console panel having a plurality of user operable switches for controlling operation  
21            of a plurality of aftermarket accessories added to the fleet vehicle, the console panel being  
22            electrically connected to said fuse panel and said lighting selection box, the console panel having  
23            at least three lighting level switches, each lighting level switch being connectable to different  
24            combinations of aftermarket lighting accessories, wherein said console panel further comprises a  
25            programmable timer delay connected to said universal wiring harness for turning off circuits a  
26            predetermined period of time after the fleet vehicle ignition switch is turned to an "OFF" position;  
27            and  
28            (d) a universal wiring harness electrically connecting said fuse panel, said lighting selection  
29            junction box, and said console panel, the wiring harness having a plurality a connectors distributed  
30            throughout the fleet vehicle adapted for connection to aftermarket accessories, the connectors  
31            being configured as plug and play connectors.

1    Claim 15. (*Currently Amended*) ~~[[The]]~~ A universal fleet electrical system ~~according to claim 9 for~~  
2    distributing electrical power to a plurality of aftermarket accessories in a fleet vehicle, comprising:  
3            (a) a fuse panel adapted for connection to a fleet vehicle's battery, the fuse panel having  
4            a plurality of lighting circuit relays, each relay having a solenoid and normally open switch contacts,  
5            each relay further having aa fuse in series with the relay solenoid;  
6            (b) a lighting selection junction box electrically connected to said fuse panel, the lighting

7. selection junction box having:

8. (i) a plurality of lighting circuits, each lighting circuit being connected to the  
9. switch contacts of a separate one of said plurality of lighting relays,  
10. each lighting circuit branching into a plurality of lighting subcircuits,  
11. each subcircuit having a fuse for circuit protection; and

12. (ii) at least one terminal block having a plurality of terminals, each lighting  
13. subcircuit being connected to a separate terminal on said terminal  
14. block, each terminal having a connector for attachment of a lighting  
15. subcircuit accessory wire;

16. (iii) wherein a plurality of lighting subcircuit accessories are programmably  
17. connected to the switch contacts of a user selected lighting relay by  
18. connecting a connector from the subcircuit accessory to a terminal on  
19. said terminal block;

20. (c) a console panel having a plurality of user operable switches for controlling operation  
21. of a plurality of aftermarket accessories added to the fleet vehicle, the console panel being  
22. electrically connected to said fuse panel and said lighting selection box, the console panel having  
23. at least three lighting level switches, each lighting level switch being connectable to different  
24. combinations of aftermarket lighting accessories; and

25. (d) a universal wiring harness electrically connecting said fuse panel, said lighting selection

26        junction box, and said console panel, the wiring harness having a plurality a connectors distributed  
27        throughout the fleet vehicle adapted for connection to aftermarket accessories, the connectors  
28        being configured as plug and play connectors, wherein said wiring harness includes a modular  
29        connector having:  
30                (a) a through-the-roof base connector; and  
31                (b) a light bar wiring harness having a weatherproof boot connector attachable to  
32        said base connector, the light bar wiring harness being adapted for a light bar accessory  
33        mountable on a roof of the fleet vehicle.

1    Claim 16. (*Original*) The universal fleet electrical system according to claim 9, wherein said console panel  
2    further comprises a keyed switch interconnected with a security power control relay adapted for connection  
3    with a fleet vehicle's battery, the keyed switch and security power control relay enabling a user to connect  
4    and disconnect power to the universal wiring harness.

1    Claim 17. (*Original*) The universal fleet electrical system according to claim 9, wherein said universal fleet  
2    electrical system further comprises a master switch with a circuit breaker adapted for connection to a fleet  
3    vehicle's battery, the master switch and circuit breaker enabling a user to connect and disconnect power  
4    to the universal wiring harness.

Claims 18-20. (*Canceled*)